

hollow member with a fluid, and (3) creating a single shock wave within the fluid to rapidly expand the hollow member into conformance with the die cavity. Then, second, third, and fourth vehicle frame members are provided. Lastly, the first vehicle frame member and the plurality of second vehicle frame members are secured together to form a vehicle frame assembly.

The Inoue reference is non-analogous art to the claimed invention and to the Marando reference. Therefore, the disclosure of the Inoue reference should not be considered at all when evaluating the patentability of the claimed invention. As set forth in Section 2141.01(a) of the MPEP, a reference must either be (1) in the field of the applicant's endeavor or (2) reasonably pertinent to the particular problem with which the inventor was concerned. With respect to the latter test, a reference is reasonably pertinent if, even though it may be in a different field from that of the inventor's endeavor, it is one which, because of the matter with which it deals, logically would have commended itself to an inventor's attention in considering his problem.

With respect to the first leg of this test for analogous art, the field of the Inoue reference (namely, a machining apparatus in which an electric discharge pressure is used to deform a flat sheet of material) is quite different from the fields of both the Marando reference and the claimed invention (namely, methods of manufacturing vehicle frame assemblies having hollow members). Thus, the field of the Inoue reference is clearly not within the field of the claimed invention. With respect to the second leg of this test for analogous art, the problems addressed by the Inoue reference (namely, the difficulties associated with performing multiple operations on a flat sheet of material so that a final shape thereof is gradually approached) is quite different from the problems addressed by the claimed invention (namely, the manufacture of tubular metal vehicle frame components by a hydroforming process that permits greater expansion capabilities of the metal). Thus, the Inoue reference is clearly non-analogous art to both the claimed invention and to the Marando reference and, therefore, should not be considered at all when evaluating the patentability of the claimed invention.

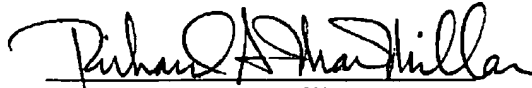
Even if the Inoue reference is considered, the teachings thereof cannot be properly combined with the teachings of the Marando reference. The Marando reference discloses a method of manufacturing a vehicle frame assembly that can include the use of hydroforming. However, as noted by the Examiner, the Marando reference does not show or suggest the claimed step of creating a single shock wave within the fluid to rapidly expand the hollow member into conformance with the die cavity. The Inoue reference, on the other hand, relates to a method of deforming a flat sheet of material and does not show or suggest the use of the process to deform a tubular member. Because the teachings of the two references are so diverse, there would have been no motivation for a person of ordinary skill in the art to combine them in the manner suggested by the Examiner.

The rationale proposed by the Examiner (namely, "in order to better the force needed to deform the tubular member") is not fully understood. In view of the cited portion of the Inoue reference, it is assumed that the Examiner intended to state that the combination was being made "in order to better control the force needed to deform the tubular member." However, better control of the amount of force that is exerted during the claimed process was not a problem that either the claimed invention or the Marando reference were intended to address, as discussed above. Accordingly, the Examiner's rationale for the proposed combination of references fails under scrutiny. Thus, it is believed that new independent Claim 13 defines the invention over the combined teachings of the Marando and Inoue references.

The Examiner also rejected independent Claim 13 as being obvious in view of the combined teachings of the Marando and Chelminski references. This rejection is also respectfully traversed. Like the Inoue reference, the Chelminski reference also relates to an apparatus in which pressure is used to deform a flat sheet of material. For many of the same reasons set forth above in connection with the Inoue reference, it is

believed that new independent Claim 13 defines the invention over the combined teachings of the Marando and Chelminski references.

Respectfully submitted,



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